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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,228	03/24/2006	Benno Bildstein	0908600233US	5031

23416 7590 07/09/2007  
CONNOLLY BOVE LODGE & HUTZ, LLP  
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EXAMINER	
LU, C CAIXIA	

ART UNIT	PAPER NUMBER
1713	

MAIL DATE	DELIVERY MODE
07/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/573,228

Applicant(s)

BILDSTEIN, BENNO

Examiner

Caixia Lu

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 1-6, 8-13, 15 and 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/24/06</u>   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group II, Claims 7 and 14, in the reply filed on May 25, 2007 is acknowledged. The traversal is on the ground(s) that there is the ligand system is the special technical feature among the restricted Groups. This is not found persuasive. As stated in the Office action mailed April 24, 2007, the ligand compound is chemically bonded to the transition metal in the transition metal complex of Formula (I), thus, the neutral ligand compound is chemically different from the ligand in the transition metal complex and there is no special technical feature shared among the restricted Groups. While the various metal complex species are represented by a common Formula (I), the various bridge groups represented by "Y" in Formula (I) do not share a common structure, "Y" is defined by six different subgenus, i.e., the transition metal complex species is in fact represented by six subgenus and those subgenus do not share a common structure. Therefore, the six transition metal species are not chemically equivalents and obvious variations among themselves and not so liked as to form a single general inventive concept under PCT Rule 13.1.

The requirement is still deemed proper and is therefore made FINAL.

The search results indicated the elected species is novel, the search is now extended to all species.

### ***Specification***

2. Applicant is reminded of the proper length of an abstract. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within

the range of 50 to 150 words. The abstract of the instant application contains more than 150 words. Appropriate correction is requested.

***Claim Objections***

3. Claim 14 is objected to because of the following informalities: Claim 14 is depended on the restricted Claim 11, applicant is urged to insert the content of Claim 11 to Claim 14.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 7 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 7, line 3, of page 6, the term "or" should be replaced with -- and --. The format of the selective members for groups "R<sup>2</sup>" and "R<sup>2'</sup>" are improper because Markush terminology requires the phrase "selected from the group consisting of" and the connector "and" between the last two members. See MPEP 2173.05 (h).

The same rejection is also applied to Claim 11 to which Claim 14 is depended upon.

***Allowable Subject Matter***

6. Claim 7 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

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7. Claim 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim.

The search results indicate that there is no prior art teaches or reasonably suggest the instant transition metal complex.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Caixia Lu whose telephone number is (571) 272-1106. The examiner can normally be reached from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful and the matter is urgent, the examiner's supervisor, David Wu, can be reached at (571) 272-1114. The fax numbers for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1700.



Caixia Lu, Ph. D.  
Primary Examiner

Filed  
3/24/06

1AP20 Rec'd FCT/PTO 24 MAR 2006

PTO/SB/08a/b (07-05)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449A/B/PTO				Complete, if Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary).				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Benno Bildstein
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	2	Attorney Docket Number	09086-00233-US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
Ch	AA*	US-6,417,302	07-09-2002	Bohnen	
	AB*	US-6,589,905	07-08-2003	Fischer et al.	
	AC*	US-6,828,454	12-07-2004	Kristen et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> -Number- Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>4</sup>
Ch	BA	DE-219 479	03-06-1985	Humboldt-Universität	See Abstract	
	BB	WO-91/09882	07-11-1991	Exxon Chemical Patents Inc.		
	BC	WO-96/00243	01-04-1996	Exxon Chemical Patents Inc.		
	BD	WO-96/23010	08-01-1996	E. I. duPont de Nemours and Company et al.		
	BE	WO-98/27124	06-25-1998	E.I. du Pont de Nemours And Company		
	BF	WO-98/40419	09-17-1998	Targor GmbH		
	BG	WO-99/06414	02-11-1999	Targor GmbH		See US 6,417,302
	BH	WO-00/05277	02-03-2000	Targor GmbH		See US 6,589,905
	BI	WO-00/31090	06-02-2000	Targor GmbH		See Abstract
	BJ	WO-03/022889	03-20-2003	Equistar Chemicals LP		
	BK	EP-1 336 615	08-20-2003	BASF Aktiengesellschaft		See US 6,828,454

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \*CITE NO.: Those application(s) which are marked with an asterisk (\*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T <sup>2</sup>
Ch	CA	Britovsek, George J. P. et al., "The Search for New-Generation Olefin Polymerization Catalysts: Life Beyond Metallocenes", Angew. Chem. Int. Ed. 38 (1999), pp. 428-447.			
	CB	Brintzinger, Hans-Herbert et al., "Stereospezifische Olefinpolymerisation mit chiralen Metallocenkatalysatoren", Angew. Chem. 107 (1995), pp. 1255-1283.			
	CC	Britovsek, George J. P. et al., "Auf der Suche nach einer neuen Generation von Katalysatoren zur Olefinpolymerisation: "Leben" jenseits der Metallocene", Angew. Chem. 111 (1999), pp. 448-468.			

Examiner Signature	<i>Benno Bildstein</i>	Date Considered	4-20-07
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Substitute for form 1449A/B/PTO				<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				Application Number	Not Yet Assigned <b>09086-00233-28</b>
				Filing Date	Concurrently Herewith
				First Named Inventor	Benno Bildstein
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	2	of	2	Attorney Docket Number	09086-00233-US

CL	CD	Smith, Richard D. et al., "Amidrazones. I. The Methylation of Some Adimrazones and Hydrazide Imides", J. Org. Chem., 36(8)(1971), pp. 1155-1158.	
	CE	Sadek, Elham M. et al., "Catalytic Polymerization of Methyl Methacrylate in Different Media Using Supported Metal Phthalocyanines, 1, Bulk Polymerization in Relation to the Microcrystalline Structure of Supported Metal Phthalocyanines", Macromol. Chem. Phys. 202 (2001), pp. 1505-1512.	
	CF	Krajete, Alexander et al., "Iminohydroxamate Early and Late Transition Metal Halide complexes - New Precatalysts for Aluminoxane-Cocatalyzed Olefin Insertion Polymerization", Eur. J. Inorg. Chem. (2004), pp. 1740-1752.	
	CG	Long, Gregory S. et al., "Transition Metal Phthalocyanine and Porphyrin Complexes as Catalysts for the Polymerization of Alkenes", Can. J. Chem. 79 (2001), pp. 1026-1029.	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	<i>[Signature]</i>	Date Considered	4-20-07
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